

Prototypes should be visible enough to create ongoing moments for reflection and be unobstructive enough to blend in the daily practice. That is one of the conclusions of Laurens Boer, Jacob Buur and Jared Donovan in this article.

WEDDING TENSIONS IN INDUSTRIAL CONTEXT

Laurens Boer, Jared

What industrial organisations think people do and what people actually do are often two very different things. But exactly this tension can be a source of innovation: **how can we give form to insights about what people do, to deliberately challenge industries' conceptions, and inspire new product and service development?**

Why prototype concepts when underlying conceptions are faulty?

What industrial organisations think people do and what people actually do are often two very different things. But it is exactly this tension that can be a source of innovation, opening up an interesting opportunity for design: how can we give form to insights about what people do, to deliberately challenge industries' conceptions, and inspire new product and service development?

Addressing tensions...

The tensions between what industrial organizations think people do and what people actually do are often hard to talk about in industrial processes of new product and service development. As design researchers in these processes it's tempting to make industry eyebrows frown once and to avoid subsequent discussions about these tensions. However, we see especially these difficult discussions and reflections as a source for innovation. It's therefore worthwhile to look for ways in which findings from the field can be represented to support these discussions. Three common used formats are ethnographies, bullet points, and storytelling. The choice and use of each format is likely to influence the extent to which the represented findings are reflected upon. Ethnographies can capture research about groups of people in great detail, but are often perceived by industrialists as long and boring. A more graspable format is bullet points, but these are often ambiguous and misleading as they don't capture the nuances of a finding. Telling stories about human actions can potentially be an appropriate in-between format, but stakeholders might get 'lost in translation' or might feel offended when these stories become tense. We looked for another way to discuss 'hard to talk about' findings from the field, and came up with provocative prototypes: prototypes.

DESIGN AND USE BETWEEN INDUSTRY TEASING OUT

PROVOTYPES

Donovan & Jacob Buur

...through high-fidelity prototypes

The longer a particular interpretation of the world seems to work, the more convinced we are that that particular view is the 'right' one. To change these conceptions, nudging them in a different direction, can pose a challenge. High-fidelity prototypes can play an important role in supporting critical reflection on conceptions. Prototypes can be experienced over a period of time and can create new meanings in interaction. By providing first hand experiences, they can initiate a stakeholder discussion on deeper issues, such as broader problems within their practices: their values, beliefs, potentially even assumptions, and their desires for the future. High-fidelity prototypes can work especially well when bringing these deeper issues to light because their quality suggests that they have a well thought-through use value and underlying design philosophy, and therefore are likely to be taken more seriously.

Provotypes: experiencing the taken-for-granted

Provotyping is a particular method of prototyping, whose deliberate aim is to foreground deeper issues and hidden conceptions. Provotypes transform ethnographic topics that are difficult to talk about into concrete things that can be experienced over time. These tensions between use and industrial context can potentially be teased out after reflecting on the provotype with other stakeholders. As provotypes can be employed in the early stages of innovation projects, these discussions and potentially 'nudged' conceptions about use-context could then inspire a human-centred new product development, or the design of new Product Service Systems.

Provoking the building industry...

The building industry is an interesting sector when we consider Product Service Systems and provotyping. Their primary concern is the construction of the building itself, and not the people who have to live in the building. In an R&D project with five companies in the building industry, we explored the potential of provotyping. What these companies had in common was their interest in the field of 'indoor climate'; for example, we worked together with a ventilation manufacturer and a rooftop window constructor. This project sought to create knowledge about people's experience and understanding of indoor climate comfort, in order to open up new development directions. As design researchers, we tried to better understand tensions between use context and industrial context by engaging both building residents →



FORESHADOWING THE FUTURE

Provotypes present another way of using prototyping: to elicit reactions of different stakeholders by literally provoking them.

